

### **Remarks/Arguments**

Claims 1-64 are pending in the present application.

Claims 1-64 are rejected.

Claims 36-64 are cancelled.

Claim 16 is amended herein.

#### **1. Rejections under 35 USC § 112, 2<sup>nd</sup> paragraph**

In the Office action, claim 16 stands rejected under 35 USC § 112, 2<sup>nd</sup> paragraph. More specifically, it was stated “[i]n claim 16, the expression ‘solidifying said conformable material’ does not have clear and proper antecedent basis in the claims principally because claim 14 (from which claim 16 depends) does not positively recite a step of solidification.” To that end, claim 16 has been amended such that the same comports with the requirements of 35 USC § 112, 2<sup>nd</sup> paragraph.

The Applicant respectfully asserts that the amendments to claim 16, and incorporated by reference in any claims depending therefrom, are not narrowing amendments made for a reason related to the statutory requirements for a patent that will give rise to prosecution history estoppel. *See Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 56 U.S.P.Q.2d 1865, 1870 (Fed. Cir. 2000).

#### **2. Rejections under 35 USC § 103(a)**

##### **a. Claims 1-13, 31, and 32**

In the Office action, claims 1-13, 31, and 32 stand rejected under 35 USC § 103(a) as allegedly being unpatentable over either United States patent 6,355,198 to Kim et al. (“Kim”); United States patent application publication 2003/0062334 to Lee et al. (“Lee”); or United States patent application publication 2004/0007799 to Choi et al. (“Choi”).

##### **i. Kim**

Claim 1 defines a method of patterning a substrate with a template having a mold, the method including, *inter alia*, positioning conformable material between the substrate and

the mold; filling a volume defined between the mold and the substrate with the conformable material through capillary action between the conformable material and one of the mold and the substrate; and applying a pulling force on at least one of the substrate and the mold to compensate for tensile forces, associated with the capillary action, upon the mold (emphasis added).

The rejection specifically acknowledges that Kim does not teach applying a pulling force as recited in claim 1, but states that such “would have been obvious to one of ordinary skill in the art at the time the invention was made...in order to prevent damage to the substrate and/or mold and to provide the desired patterning to the substrate.” Office action, page 4, last sentence of paragraph no. 6. (emphasis added)

As a threshold matter, the Examiner is reminded that obviousness can only be established by modifying the teaching of the prior art to produce the claimed invention where there is some teaching, suggestions, or motivation to do so. MPEP 2143.01 at p. 2100-127. In the absence of such reason or suggestion, the threshold of *prima facie* obviousness is not met. In the present case, the Examiner has not identified anything within Kim that suggests a substrate and/or mold may be damaged due to forces associated with capillary action during the patterning process, which as described above, is the basis set forth in the Office action in attempting to establish the obviousness of a limitation (applying a pulling force...) not taught by the prior art. Such a rejection smacks of hindsight and can not be proper. See MPEP 2142. Moreover, Applicants respectfully assert that Kim is completely silent on these issues. Accordingly, Applicants respectfully assert that a *prima facie* case of obviousness has not been established and that the rejection of claim 1 has been traversed with respect to Kim. Further, Applicants respectfully assert that claims 2-13, 31, and 32, depending from claim 1, with their respective limitations, are likewise not render obvious by Kim. If the Examiner disagrees, Applicants respectfully request that the next Office action specifically state where in the prior art the suggestion for applying a pulling force on at least one of the substrate and mold to compensate for tensile forces associated with capillary action upon the mold can be found.

ii. Lee

Applicants respectfully contend that the arguments set forth above with respect to Kim apply with equal weight here. Accordingly, Applicants respectfully assert that a *prima facie* case of obviousness has not been established and the rejection of claim 1 has been traversed with respect to Lee. Further, Applicants respectfully assert that claims 2-13, 31, and 32, depending from claim 1, with their respective limitations, are likewise not render obvious by Lee.

iii. Choi

Pursuant to 35 U.S.C. § 103(c), Choi cannot be used to render the pending claims obvious, since Choi was owned by the assignee of the present application at the time of filing. The American Inventors Protection Act of 1999 (“AIPA”) amended 35 U.S.C. § 103(c) to add that subject matter that only qualifies as prior art under 35 U.S.C. § 102(e) and that was commonly owned, or subject to an obligation of assignment to the same person, at the time the invention was made cannot be applied in a rejection under 35 U.S.C. § 103(a). Specifically, § 103(c) now states:

Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

According to the AIPA § 4807(b), §103(c) applies to any patent application filed on or after the date of enactment, November 29, 1999. Here, the present application was filed on August 21, 2003 (i.e., after November 29, 1999) so that the changes to § 103(c) made by the AIPA apply to this application. Choi was published on January 15, 2004 from an application filed on July 11, 2002. Thus, Choi is prior art to the present application under §102(e). Choi et al. and the present application were also commonly owned or subject to assignment to the same person at the time that the invention of the present application was made. In this regard, the undersigned, an attorney of record states:

U.S. Patent Application No. 10/645,306 and U.S. Publication No. 2004/0007799 were, at the time the invention of U.S. Patent Application No. 10/645,306 was made, owned by Molecular Imprints, Inc. or subject to an obligation of assignment to Molecular Imprints, Inc.

In support of this statement, copies of the assignment papers associated with Choi (corresponding to U.S. Application No. 10/194,411) are attached as Exhibit B and copies of the assignments filed in the present application are attached as Exhibit A. In summary, because Choi is only prior art under 35 U.S.C. § 102(e) and because Choi and the present application were commonly assigned or subject to assignment to the same person at the time of the invention, Choi can not be used to render the claims obvious pursuant to 35 U.S.C. § 103(a). Accordingly, Applicants respectfully request that the pending obviousness rejections of record based on Choi be withdrawn.

b. *Claims 14-30 and 33-35*

In the Office action, claims 14-30 and 33-35 stand rejected under 35 USC § 103(a) as allegedly being unpatentable over either Choi or United States patent 6,334,960 to Willson et al. (“*Willson*”) in combination with either Kim or Lee.

i. *Choi*

As mentioned above, it is respectfully contended that the pending obviousness rejections of record based on Choi be withdrawn since Choi was owned by the assignee of the present application at the time of filing

ii. *Willson in combination with either Kim or Lee*

Claims 14 and 22 define a method of patterning a substrate with a template having a mold, the method including, *inter alia*, positioning conformable material between the substrate and the mold; filling a volume defined between the mold and the substrate with the conformable material through capillary action between the conformable material and one of the mold and the substrate; and applying a pulling force on at least one of the substrate and the mold to compensate for tensile forces, associated with the capillary action, upon the mold (emphasis added).

The rejection specifically acknowledges that Willson does not teach applying a pulling force as recited in claims 14 and 22, but states that such “would have been obvious to one of ordinary skill in the art at the time the invention was made...in order to prevent damage to the substrate and/or mold and to provide the desired patterning to the substrate.” Office action, page 6, last sentence of paragraph no. 8. (emphasis added)

As a threshold matter, the Examiner is reminded that obviousness can only be established by modifying the teaching of the prior art to produce the claimed invention where there is some teaching, suggestions, or motivation to do so. MPEP 2143.01 at p. 2100-127. In the absence of such reason or suggestion, the threshold of *prima facie* obviousness is not met. In the present case, the Examiner has not identified anything within Willson that suggests a substrate and/or mold may be damaged due to forces associated with capillary action during the patterning process, which as described above, is the basis set forth in the Office action in attempting to establish the obviousness of a limitation (applying a pulling force...) not taught by the prior art. Such a rejection smacks of hindsight and can not be proper. See MPEP 2142. Moreover, Applicants respectfully assert that Willson is completely silent on these issues. Accordingly, Applicants respectfully assert that a *prima facie* case of obviousness has not been established and that the rejection of claims 14 and 22 has been traversed with respect to Willson. Further, Applicants respectfully assert that claims 15-21, 30, 33, and 34, depending from claim 14, and claims 23-30 and 35, depending from claim 22, with their respective limitations, are likewise not render obvious by Willson. If the Examiner disagrees, Applicants respectfully request that the next Office action specifically state where in the prior art the suggestion for applying a pulling force on at least one of the substrate and mold to compensate for tensile forces associated with capillary action upon the mold can be found.

### 3. Conclusion

As a result of the foregoing, it is asserted by Applicants that claims 1-35 in the present Application are in condition for allowance, and Applicants respectfully request an allowance of such claims. Applicants respectfully request that the Examiner call

Applicants' agent at the below listed number if the Examiner believes that such a discussion would be helpful in resolving any remaining issues.

Respectfully Submitted,



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